M/047/0090

Earth Energy Resources

PR Springs Mine Informal Conference

TAKEN AT: Department of Natural Resources

1594 West North Temple, Room 1060

Salt Lake City, Utah

DATE:

Tuesday, July 27, 2010

TIME:

2:03 p.m. to 4:21 p.m.

REPORTED BY: Michelle Mallonee, RPR

ATKINSON BAKER COURT REPORTING JOB #A406FEA

RECEIVED

AUG 3 1 2010

Div. of Oil, Gas & Mining

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1	APPEARANCES	1	Tuesday, July 27, 2010; Salt Lake City, Utah
2		2	PROCEEDINGS
3		3	2:03 p.m.
	/ISION OF OIL, GAS AND MINING:	4	
	n R. Baza, Director and Hearing Officer	5	THE HEARING OFFICER: Folks, my name is John
	na Dean, Associate Director, Mining	6	Baza. I'm the director of the Division of Oil, Gas and
	Il Baker, Minerals Program Manager	7	•
	lie Heppler, Environmental Scientist n Munson, Environmental Scientist	l	Mining, and I'm also the hearing officer for this
	n Kunzler, Environmental Scientist	8	informal conference we're having today. I'm going to
	Springer, Public Information Officer	9	stand for a minute, just so everyone can hear me. And
9	opinigo., i done zinomacion emice.	10	this is to let the individuals know, who want to speak,
10 ASS	SISTANT ATTORNEYS GENERAL:	11	that you need to clearly identify yourself for the court
11 Ste	ven F. Alder - Division Attorney	12	reporter, and speak up because we don't have a sound
	d Donaldson - Division Attorney	13	system in this room. So she may find it hard to hear
12		14	what you are saying if you don't project a little bit.
13		15	So let me get started with this. This is kind
14		16	of our second time doing an informal conference on this
15		17	particular matter. And we did something similar to this
16 17		18	back in November not nearly so many people.
18	•	19	The informal conference that we're doing is one
19		20	that's prescribed by rule. And when we do a minerals
20		21	•
21			permit, the after that permit has been analyzed and a
22		22	decision is made by the Division, it then goes out for a
23		23	public comment period and is noticed up in the paper.
24		24	And during that 30-day period after we've made a
25		25	decision, there's an opportunity for people to send in
	Page 2		Page 4
	EARTH ENERGY RESOURCES:	1	comments to us to indicate that they want a hearing of
	OHN DAVIS, ESQ.	2	this nature, and we respond to that.
	ME ROBERTS & OWEN, LLP	3	And that's exactly what happened in this case,
	99 South Main Street uite 1800	4	is that there was a public notice. We offered a period
	alt Lake City, Utah 84111-2263	5	of time for public comment. We did receive such a public
	CLAY CUTHBERT, Vice President of Operations, Earth	6	comment requesting that we hold this informal conference.
	gy Resources	7	Now, I will tell you that the rules we follow in
6	<b>3,</b>	8	that regard might be a little bit different than what
KARI	LA KNOOP, JBR Environmental Consultants	9	you've seen in other public hearings. In other words,
7		10	this is not a hearing to just take public comment. I
8		11	
	PRESENT:		think the period of time we had for that is prescribed by
	N WEISHEIT, Conservation Director, Living Rivers	12	rules. But having said that, we're not here to tell
	ANA WILLIAMS, Peaceful Uprising	13	anybody, You can't speak, or, You can't provide us with
	entra en		
12 ASHL	LEY ANDERSON, Peaceful Uprising	14	information that's necessary in our analysis of the
12 <b>ASHI</b>	LEY ANDERSON, Peaceful Uprising	14 15	information that's necessary in our analysis of the permit.
12 <b>ASHI</b> 13 14	LEY ANDERSON, Peaceful Uprising		·
12 <b>ASHI</b> 13 14 15	LEY ANDERSON, Peaceful Uprising	15	permit.
12 <b>ASHI</b> 13 14	LEY ANDERSON, Peaceful Uprising	15 16	permit.  We want to be as inclusive as possible in
12 <b>ASHI</b> 13 14 15 16	LEY ANDERSON, Peaceful Uprising	15 16 17	permit.  We want to be as inclusive as possible in getting information that's going to help us make as good
12 <b>ASHI</b> 13 14 15 16 17	LEY ANDERSON, Peaceful Uprising	15 16 17 18	permit.  We want to be as inclusive as possible in getting information that's going to help us make as good a decision as possible.  We're going to follow a format here, which was
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12 ASHI 13 14 15 16 17 18 19 20 21 22 23	LEY ANDERSON, Peaceful Uprising Page 3	15 16 17 18 19 20 21 22 23	permit.  We want to be as inclusive as possible in getting information that's going to help us make as good a decision as possible.  We're going to follow a format here, which was kind of laid out at the first hearing that we had. And in that, I'm going allow the Division to have first say.  Since they are the one who analyzed the permit, they are the ones who made the decision on the record, we're going

where we just start throwing out our comments. I think 1 Following that, we have the letter of request 1 there is an opportunity to speak through those 2 2 for the hearing from a group, Living Waters, Peaceful --3 MR. WEISHEIT: Living Rivers. 3 represented at the table here. And I think that probably 4 THE HEARING OFFICER: Living Rivers, excuse me. you are going to hear from them things that are on your 5 5 And I'm going to give them a chance to kind of mind, anyway. 6 express why they sent in the letter and why they wanted 6 But if there's something that doesn't get 7 7 addressed, if there's some point that is missed that is the hearing and what their concerns are. 8 8 valuable to our analysis of this, we certainly want to Following that, we would normally give time to 9 the applicant, which is Earth Energy Resources, to 9 hear it. And at the appropriate point in the meeting, 10 10 I'll ask if there's any input of that nature. respond to that. And we would just generally go from Does that sound reasonable to the parties at the 11 11 there and see if there was anything else that needs to be 12 considered or questions that need to be asked and answers 12 13 13 Do you have any comment on the proposed format obtained at that point. 14 that I've laid out? 14 Just so you know, even though I'm the director 15 of the Division, I'm as impartial as I can be in this 15 Yes, Steve. MR. ALDER: You might indicate the opportunities 16 16 matter. I have not been involved in the analysis by the 17 for appeal and decision, and that sort of thing -- or we 17 Division, in terms of issuing that permit. I know about 18 as much of this matter that we're hearing today as the 18 will. I will. 19 THE HEARING OFFICER: Okay, if you would. 19 letter that was received from Living Rivers and the 20 20 MR. ALDER: I will. notice of hearing that we've published for this matter. 21 21 THE HEARING OFFICER: I'll tell you this: I'm So having said that, Division, I'm sure you have 22 22 not a lawyer, okay. I'm an engineer by background, and I a copy of the letter that was sent by Living Rivers. Has 23 administer the affairs of the Division. But I may have 23 the applicant received a copy of that letter, and do you 24 know what it contains? 24 to go out and seek legal counsel in order to make a 25 25 MR. DAVIS: Yes, we have. decision on this hearing that we're having today. But as Page 8 Page 6 Steve points out, there is an opportunity for appeal on THE HEARING OFFICER: So, you know, I don't know 1 1 2 2 this. And normally that appeal, once I render a that there's a big need to rehash a lot of that. But at 3 3 decision, is going to go to our Board of Oil, Gas and least make sure that if you have points that you want to 4 4 Mining. They meet once a month. There are set address related to that letter, let's get it in the 5 5 procedures on how to file a request for a Board hearing. information that we can use to analyze. 6 And those are all laid out in regulation. Yes, ma'am. 7 7 But Steve, you can certainly address that. MS. FRANKLIN: (Inaudible.) 8 8 THE HEARING OFFICER: Ma'am, you need to stand Yes. 9 9 MS. WILLIAMS: Will there be any time limits up and say your name so that the court reporter can hear 10 you. 10 on -- between the different parties? THE HEARING OFFICER: You know, I think we ought 11 11 MS. FRANKLIN: My name is Naomi Franklin. I'd to discuss that as part of your statements and what we 12 like to know the extent of the comment period and to 12 decide here. There is no hard and fast rule to an 13 where comments may be made. 13 THE HEARING OFFICER: Okay. I hope the Division informal conference. What we're doing today isn't guided 14 14 by regulation, other than it says you need to have one of 15 is going to address that in some of their statements. 15 these meetings. So basically what we do today, we'll 16 But as I understand it, the comment period for this was 16 17 decide it as we go. So whatever an appropriate time 17 the 30 days after we initially published notice. So that 18 comment period is over and done with. This hearing is 18 frame is that we can all agree to would be what I would 19 19 hope for. not a hearing to accept additional public comment. This 20 Maybe for the benefit of the court reporter, can 20 hearing is to address the concerns expressed by Living 21 21 we just define who is going to be the principal Rivers in the letter that they sent to us. And that's 22 spokesperson for each of the parties? 22 specifically what we're here for. 23 23 The Division, it will be ... Now, again, as I said in the beginning, we're MR. ALDER: Yeah. Let me introduce myself. I'm 24 24 not here to shut down valuable input into this. But at 25 the same time, I don't want this to become a free for all 25 Steve Alder. I'm the attorney for the Division, and I Page 9 Page 7

3 (Pages 6 to 9)

work at the attorney general's office. The Division 1 us some background and history on what brings us here 2 2 today will be -- we have three people -- well, we today. 3 actually have all the staff that analyzed this 3 MR. ALDER: Okay. I'll remain seated, if that's 4 application here. 4 all right -- if everybody can hear me -- and just kind of 5 5 Paul Baker is to my immediate right. He's in turn sideways just a little bit. 6 charge of the minerals program. Dana Dean is in charge 6 This decision was made to approve a mine permit. 7 of the mining program for the Division of Oil, Gas and 7 what's called a large mine permit under the Utah mining 8 Mining. And they will introduce the members of their 8 laws. And there are certain requirements established by 9 staff that reviewed this appeal, as we go forward. And 9 statute, and that's at 40-8-1, that's the Utah Code. And 10 so I will speak just as an introductory matter and then 10 that is the authority of the Division to regulate these 11 11 turn the time over to the Division. kind of mining programs. They have adopted rules. The 12 THE HEARING OFFICER: Okay. 12 rules are under the Administrative Code in R647-4, that's 13 13 And for Living Rivers, could you introduce for larger mines. 14 14 yourself and who is going to be speaking. And the way the permit is applied for and 15 MR. WEISHEIT: Yes. My name is John Weisheit. 15 approved is dictated by those statutes and those rules. 16 That is spelled W-E-I-S-H-E-I-T. And it's pronounced 16 There are certain things that an applicant has to do to 17 17 Weisheit. It's a German name. I am the conservation satisfy the Division to get a permit. They include --18 18 director of Living Rivers. And I am the Colorado certain things have to be included in the application. 19 19 Riverkeeper of the Waterkeeper Alliance. And I live in They include a mine plan, a reclamation plan, some 20 20 Moab, Utah. And I would like to introduce Juliana analysis of impacts. There has to be a surety provided. 21 21 Williams. Also -- well, he's both a Moab and a Salt Lake But there are a lot of things that are not 22 City person -- this is Ashley Anderson. 22 required. Some matters are subject to the jurisdiction 23 23 THE HEARING OFFICER: Okay. Glad to meet you. of other agencies. The Division of Air Quality, Division 24 24 And for the applicant. of Water Quality, Water Rights, they all have 25 25 MR. DAVIS: Thank you, Mr. Baza. jurisdiction over a specific aspect of state law. There Page 10 Page 12 1 1 My name's John Davis. I'm an attorney here in are federal laws that also apply to a permit. 2 2 Salt Lake with Holme Roberts & Owen. I represent Earth Our obligation is to make sure they satisfy the 3 3 Energy Resources. To my left is Mr. Barday Cuthbert. Division's rules and regulations as required by statute. 4 Do you want me to spell that? B-A-R-C-L-A-Y, 4 And we require that an applicant eventually satisfy all 5 C-U-T-H-B-E-R-T. And Mr. Cuthbert is the vice president 5 state and local rules. So I think -- there are county 6 of operations for -- I'll call it EER, rather than go 6 rules that may apply, to the extent that they're not 7 7 through Earth Energy Resources each time. preempted by state or federal law. 8 Then to my right is Karla Knoop. And that last 8 That's important here, because as I've reviewed 9 name is spelled K-N-O-O-P. And Karla is with JBR 9 the letter that was filed by Living Rivers, there are a 10 10 lot of important issues that are significant to the Environmental, an environmental consulting firm here in 11 Salt Lake City. And she'll be testifying on some of the 11 public debate about energy. And obviously, this group is 12 12 technical aspects of our NOI. concerned about the larger picture of energy and policy. 13 13 THE HEARING OFFICER: Okay. And I'm looking for That is not the role of the Division. The role of the 14 Vicki. Is Vicki in here? Vicki Southwick? No. Okay. 14 Division is to not set policy, but to enforce the policy 15 15 I think we have a sign-up sheet going around. that's been set by the legislature. 16 16 And does that sign-up sheet ask for phone and email So with that, sort of, preview of 17 17 information? the understanding of what the Division did, I'd like to 18 18 MR. KUNZLER: Name, address, phone, and email. turn the time over to Paul Baker to give a history of the 19 19 THE HEARING OFFICER: Okay. So as that goes size, the scope. There's some important differences 20 20 around, please add your name to the list so that we know between this project and other projects that have 21 that you're here. We'll try also to use that list to 21 received a lot of national prominence in Canada and other 22 22 places, and Paul will explain that. He will be able to inform people what the decision making in this matter is 23 23 going to be. refer to the maps on the Board. 24 24 So with that, I guess that we're going to turn I would say that -- just a little more 25 25 some time over to the Division to start us out and give background on what happened before -- there was an appeal

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brought by Southern Utah Wilderness Alliance of this 1 2 decision. And it was determined that at the time that 3 the decision was made final, it's supposed to be 4 published in the county, and it was not published in 5 Grand County. So we republished in Grand County. We got 6 this application. So this is sort of a second hearing of 7 this permit, in case you were wondering why we said that, 8 why it's been heard before. That's what happened. And 9 some of the issues that have been raised are the same as 10 were raised by Southern Utah Wilderness Alliance, some of 11 them are new.

We hope we can provide a fair hearing. My only objection to -- and I guess agreement with the introductory statement by Director Baza is that, since we can't address things like carbon levels or global warming, we don't think a lot of time should be spent in this hearing talking about that. But that's just the Division's point of view.

I'll turn the time over to Paul Baker.

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20 MR. BAKER: My name is Paul Baker. I'm 21 manager of the minerals regulatory program for the 22 Division of Oil, Gas and Mining. I'd like to introduce a

23 few people on the staff. Lynn Kunzler is a biologist;

24 Tom Munson, who is a hydrologist; and Leslie Heppler, who 25 is a geologist and the permit lead for this project.

One of the issues that was raised in the previous hearing was that we do not have detailed plans for the west pit. And we agreed with Southern Utah Wilderness Alliance, and the Sierra Club, and the operator, that when the operator decides to move into the west pit, that that will be a significant revision that will be advertised to the public. And so we will take further public comments at that time.

As with any mining operation, it would begin by stripping topsoil from the mine areas and the operations areas. Perhaps I could point out to the blue. Up here is a plant site. It's basically a processing area. And then this -- it's kind of an orange-ish yellow -- that's a topsoil storage area. So the topsoil would be stripped from all of the areas proposed to be disturbed. The operator would begin by stripping the topsoil and then overburden. And initially, the overburden would be brought down into this area. And as the sand -- the tar sand is processed, it would be stored in this area. And then as the pit progresses, as there's more room, the pit would be back filled, so the processed sand and additional overburden and interburden would be stored within the pit.

So there would be no discharge of runoff water from the pit or from the processing area. That would all

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1 And perhaps I could elaborate just a little bit 2 more about the public notice process. We originally gave 3 tentative approval for this project in May of 2009. And 4 that was published in the Salt Lake Tribune and the 5 Vernal Express. And as Steve mentioned, we did not 6 publish it in the Moab paper at that time. 7

We subsequently published it on March 25 of this year in Moab Times Independent. And a couple of weeks prior to that, we had notified the Grand County council of this tentative decision.

I'd like to refer to the maps and just give a brief overview of the project. The project is on the Grand and Uintah County line. It straddles the line. And -- okay, here's Vernal, here's I-70, and here's the project, right here. There is currently a permitted five-acre site. This map shows the proposed entire -the total proposed operation. And this black portion, right here, is the current five-acre site. And these other maps show, like, some lease areas. And this shows watershed boundaries and other water features.

The operator has proposed to begin operations in this area here, the pink. And there would be a waste dump here. This is called the north pit -- that's what we refer to it as. This, over here, is referred to as the west pit.

be self-contained.

Those are really some of the basic items, I 2 3 guess. Upon reclamation, it would be graded to about a 4 two-and-a-half to one slope -- no steeper than two to 5 one, two-and-a-half to one -- and topsoiled and 6 revegetated. It's quite simple, but that's basically it. 7 And I guess that's all. 8

Do you have questions?

MR. WEISHEIT: Yeah. Hi, Paul. It's nice to meet you. My name is John Weisheit. I appreciate the letters that you wrote to us.

I have a question about the public comment for the west pit. Does that happen before or after initial mining operations?

MR. BAKER: The initial mining operations would begin, theoretically, now. But as I mentioned, we don't have a detailed plan for the west pit now. And so there would be a further comment period before the west pit was opened.

MR. WEISHEIT: But after initial mining begins? MR. BAKER: Yes. Yes, that's right.

MR. WEISHEIT: Okay. Thank you. 22

23 MR. BAKER: Okav.

24 THE HEARING OFFICER: Mr. Alder, do you have 25

more that you want to present?

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5 (Pages 14 to 17)

MR. ALDER: There will probably be a lot of details that we can add in response to the comments. I think we would prefer to hear the objections and comments from the petitioners. THE HEARING OFFICER: Okay. Now you'll notice, Mr. Weisheit went ahead and asked a question. I have no problem with that, as long as we can agree that that's MR. ALDER: We're fine with that. THE HEARING OFFICER: Okay, All right. Well at this point, Mr. Weisheit, I'm going to turn some time over to you, to kind of explain your letter and concerns that you have with the Division's process here. MR. WEISHEIT: Thank you. And I would like to make comments, but Juliana -- if it would be all right --I would like for her to go first because she --THE HEARING OFFICER: Certainly. MR. WEISHEIT: -- I think, does a great job of summarizing. THE HEARING OFFICER: Okay. MS. WILLIAMS: My name is Juliana Williams. And I am an organizer with Peaceful Uprising, and I do work with Living Rivers. I have a degree in geology, and am in the process of obtaining a Master of Public Policy. Page 18

arsenic, mercury, benzene, and cyanide. And also, according to environmental — the environmental integrity project, refining tar sands crude results in higher emissions of sulfur dioxide, hydrogen sulfide, sulfuric acid mist, and nitrogen oxides, more than refining conventional oil. And we fell that this is a very important part in looking at the total impact of the mine, because if the tar sands crude is refined in Utah, that will have an affect on the people near the

And in 2009, there were four refineries in Utah that imported tar sands crude oil from Canada and processed it. Those were Chevron in Salt Lake City, Tesoro West Coast in Salt Lake City, Holly Refining and Marketing in Woods Cross, and Silver Eagle Refining in Woods Cross. And refining tar sands oil requires specific adjustment to operations so that they can accommodate the additional impurities in the oil compared to conventional oil. And together, these refineries imported approximately 5.2 million barrels of tar sands crude. Under full production of 2000 barrels a day, 350

crude. Under full production of 2000 barrels a day, 350
 days a year, the PR Springs mine would increase the

amount of tar sands crude refined in Utah by 13 percent.
And we feel that that is a significant increase in the

risk to the people and the health of Utah, that should be

And I wanted to bring up the concerns that Peaceful Uprising has with this proposal. They fall under two primary categories.

The first is that we believe that this — the NOI fails to consider the full impacts of the mine. And then we have some specific concerns about the impacts of the operation as described in the NOI.

First I'd like -- sorry about that. Would you folks like me to stand up?

So the first thing that, you know, we want to make clear is that everyone knows that the PR Springs Mine would be the first commercial tar sands mine in the United States. And as such, this country and the state of Utah has very little experience regulating this industry. And so we want to make sure that the regulations and the process for dealing with this mine are as deliberate and careful as possible.

So first and foremost, we believe that the environmental assessment of the NOI is inadequate in scope. While Earth Energy Resources -- and I will also use the abbreviation, EER -- is planning to extract the crude bitumen from the tar sands mine, that is not the extent of the impact. The impact also goes to the refineries that the bitumen is sent to, which will introduce toxic contaminants, like lead and nickel,

considered as part of this mine application.

So as a result of that, therefore, we ask that the Division of Oil, Gas and Mining require disclosure of where the tar sands crude would be refined — if that information is known — or ask that it is disclosed as soon as it's known, so that the public has an opportunity to weigh in on the health issue. And the reason we ask that is because this is such a new industry to the area that we do not have experience in regulating.

Another impact that we feel is not addressed in the NOI is the impacts that the tar sands mine would have on the road capacity in the two counties. Most of the roads leading up to the mine are dirt and gravel roads, many of which are, frankly, impassable in the wintertime or after heavy rains. And assuming that Earth Energy Resources will transport the crude oil from the mine in standard tank trucks, this would require approximately 19 vehicle trips going to and from the mine each day, in addition to the vehicles used by employees. And we feel that this would introduce quite a bit of strain on the road capacity out in these counties. And we would like to know, you know, whether or not the tax payers of those counties will be the ones paying for the maintenance of the roads, which otherwise, you know, without the mine would see much lower traffic.

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And in addition to the usage of the roads, that means that there will be a significant increase in the amount of dust produced by all that traffic. And while the NOI touches on dust suppression at the actual mine site, the dust created by traffic to and from the site, there's no plan to deal with it, no plan to spray water or upgrade the roads. And that is just as significant as the mine -- or as the dust produced by mining operations.

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So as a result, we're asking that Earth Energy Resources consult with both Grand and Uintah counties about strategies to minimize the dust along the primary access roads and help develop strategies for how to keep those roads in proper shape without unduly burdening the taxpayers of those counties.

I want to transition from the scope of the NOI now, to the actual impacts that we take objection to.

The first refers to the overburden and interburden storage areas which, as Paul mentioned, are those brown sections towards the southern end of the mining site. According to the NOI, 7.9 million cubic yards of material will be removed from the mine in total, and 4.8 million cubic yards of processed sand, interburden, and overburden will be returned. That means

24 that the remainder of the material, 4.9 million cubic

25 yards, will be deposited in these areas, right here. those are lacked as permanent structures, that they could have a significant impact on the water quality of the

And then the last issue that I would like to touch on is the question of water collection and quality. According to the application, precipitation that accumulates in the bottom of the mine in collection sumps will be, "Removed from the pit along with the solid materials and processed along with the bitumen-bearing sands. As needed, it will also be pumped from the mine and used for dust suppression on mine and plant roads."

This is water that will be at the bottom of the mine and exposed to the tar -- the raw ore of the tar sands. We are concerned about the potential for surface water contamination; and that if this water is used to suppress dust without first testing and treatment, we're concerned that it would present a risk to surface water contamination.

I would like to say that we have significant concerns about the company's track record in this area. The pilot mine that was dug -- this black area right here, the initial mine -- from what we can tell it has been left unlined, unmonitored, and untreated, and available for wildlife and livestock to consume. Pictures from SUWA and from Living Rivers, from both this

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Our concerns about this rely on the impact that those, essentially, valley fills will have on the head waters of Willow Creek and the long-term monitoring and maintenance.

Under Section 404 of the Clean Water Act, any discharge of dredged fill -- dredge or fill materials into waters of the United States is forbidden unless specifically authorized by a permit issued by the Army Corps of Engineers. That's a federal permit that supersedes state regulations.

Now, these valley fills will basically be placed into canyons that are the head waters of Willow Creek, which flows into the Green River and then the Colorado River. By very significantly disturbing those canyons, it will have an impact on the headwaters of the water flow. So we ask that Earth Energy Resources clarify whether or not a dredge and fill permit is required, and if not, what they will be doing to ensure that those valley fills do not affect the water quality of Willow Creek.

And that goes into the long-term maintenance question where, essentially, these -- in the NOI it says that these will be stored permanently. But there is not a plan to monitor surface water pollution, suppress dust on those specific areas. And so we are concerned that if summer and last summer, indicated that there were several feet of water in the pit. And we're concerned that hydrocarbons, heavy metals, and volatile organic compounds might have leached into the water in the bottom of that pit.

I have serious doubts that if this is the level of care that the company shows for our water and land and wildlife, how can we expect them to meet their claim of zero discharge and no impacts to surface water? It appears that there already is an impact there, because they have been left unmonitored.

And I just want to mention that correspondence from Paul Baker states that, "The operator would be potentially subject to enforcement action if a discharge occurred." That was in his response letter to our netition letter.

And one of the things that we would like to know is: What types of enforcement action would be taken? What level of discharge would require enforcement action? And whether enforcement action will be investigated with regards to the water collected at the pilot mine.

And then the final comment that I would like to make is that, we would just like clarity on the process for public involvement and edification for all amendments to the NOI. What types of changes would require public

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comment and what types of changes would not? That's a question for the Division, that we'd like to have clarity on.

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So to wrap up, you know, beyond the contributions that this project and the product of tar sands would have towards climate change, which we've heard is not really the purview of the Division, Peaceful Uprising and Living Rivers object to the approval of the PR Springs Mine, due to failure of the NOI to address the full water, air, and health impacts of the tar sands introduced to the region; the inadequate plan to address the need for road maintenance and dust suppression; the lack of clarity regarding the need for a dredge and fill permit under the Clean Water Act; and failure of Earth Energy Resources to appropriately protect the mine site from water contamination at its initial mining pit.

And further concerns about water and air quality and wildlife impacts will be addressed by John Weisheit.

MR. WEISHEIT: I would like Ashley Anderson to precede me, because what he has to say isn't really lengthy.

22 MR. ANDERSON: Okav. I'll stand up.

Hi. My name is Ashley Anderson, and I'm with Peaceful Uprising, been working with Living Rivers, also.

I'm going to read a statement by a person named Logan

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"Earth Energy Resources is planning to use a suite of chemicals that should give Grand and Uintah counties pause for analysis. D-limonene, one of the components of EER solvents, has not been evaluated for genotoxicity, carcinogenicity, potential for endocrine disruption, or reproductive and developmental toxicity by any major health organization, including the US Environmental Protection Agency, World Health Organization, or National Toxicology program.

involve destroving one of our greatest gifts.

"Another component, alkylbenzene sulfonate, has been proven toxic to aquatic fauna at the parts per million level. This is equal to 1/10 of a percent, or roughly equal to four drops of a pollutant in a 55-gallon drum of water. This level of pollution is nearly impossible to avoid during tar sands extraction and processing, as the Canadian province Alberta is discovering. The recent reporting of mutated fish" -- a web link follows that -- "in Athabasca Lake downstream from Alberta's tar sands operations and no other industry raises more questions.

"There's no man-made technology that can guarantee zero leakage of contamination into our natural waters. Survival in the high desert depends absolutely on our natural waters. Once our waterways are polluted,

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Hansen. He's a resident of Grand County. He couldn't make it up here today because of car troubles. So he prepared a statement and I'm going to read it for him. I'll follow up with a few thoughts of my own, but make it nice and short. He's a geochemist. So everything after this point will be Logan Hansen.

"As a citizen of the United States, resident of Grand County, and as a geochemist specializing in the affects of polluting natural systems, I am adamantly opposed to the county and country moving forward with any tar sands operations, and especially so for operations in Grand County. We in Grand County are blessed with great natural beauty, wide open spaces, and dean air and water. We'd like to keep it that way.

"The proposed operations in Grand and Uintah counties will destroy natural habitats, pollute water, change the physical landscape of the region, and leave a chemical legacy likely to persist for generations. They will produce few, if any, local jobs. And the profits and extracted energy will not directly benefit the counties. I am disappointed that the State of Utah and the involved counties appear willing to sacrifice a pristine tract of natural land for a bit of tax revenue. The county should, instead, focus on stimulating the local economies and producing local jobs that do not

it is extremely difficult, at best, to remediate them.

Any potential benefits to the proposed tar sands operations are vastly outweighed by the risks." That's the end of Logan Hansen's statement.

On a personal level, I went to high school in Grand County. I have family that lives there. I have lived there many times. And I've also lived in Salt Lake. I have to say the idea that this horrifying operation of tar sands extraction coming to my state upsets me and upsets a whole lot of people that are near and dear to me. And it doesn't leave a very intelligent legacy for our state or our country for a direction to go in. These are limited resources that have a huge environmental impact. And we'd be wise to take another look at this permit. And I'm also disappointed in the amount of time that Grand County was given to weigh in on this. I know that it's a difficult job to keep track of all this stuff for the DOGM. I appreciate their hard work in doing this, to balance the public interests against the legal precedents, and everything like that. Sounds like a very complicated job that I wouldn't want to do or probably wouldn't be capable of doing.

But I think that it's time to step back, stop, and take another look at this permit. It would be the smart thing to do. Thanks.

THE HEARING OFFICER: Mr. Anderson, is there a 1 1 2 Thank you. 2 possibility that we could get a copy of Mr. Hansen's 3 3 statement? 4 4 MS. WILLIAMS: Actually, we'll provide you with 5 5 a copy of all of our statements. 6 6 THE HEARING OFFICER: Okav. Great. 7 7 MR. WEISHEIT: Hi. My name is John Weisheit. 8 8 I'm 56 years old. And I'm doing this so you can get to 9 9 know me a little better. 10 10 I have recreated on the Colorado River my entire 11 11 life since infancy, and its tributaries. I have also 12 worked as a professional river guide on the Colorado 12 13 13 River and all its tributaries for over 30 years. I have 14 14 thousands of river trips. 15 15 My first trip through the Uinta Basin of the 16 and how long will that take? 16 Tavaputs Plateau, where this facility is going to be 17 17 existing, was in 1980. And my last trip was just a week 18 ago with Ms. Simon over here. We had a great time. 18 19 19 And I'm also an author. I have worked with Jane 20 20 Belnap and Robert Webb of the United States Geological 21 21 Survey. We wrote a book together about the human and 22 22 environmental history of the rivers in Canyonlands 23 23 National Park, and the changes that have occurred in the 24 last 125 years. This book was published by the 24 25 25 University of Utah. Page 30 In the year 2000, I became a river activist, and 1 1 2 we formed a nonprofit organization called Living Rivers. 2 3 3 We were first a project of the Center for Biological Diversity. I'd like to point out that in our letter to 4 4 5 5 UDOGM, the Center for Biological Diversity also signed on 6 6

MR. WEISHEIT: The conditional land use permit.

So the reason why is because we find this to be a very complicated initiative. We're currently filing FOTAs with the EPA. We haven't received these things yet. We want to serve the public in its interest to provide as much educational material about this. We need time to get these documents and to disseminate them to the public and to UDOGM. And we would like, consequently, the administrative record to remain open so that we can supply this information to the benefit of all

Do you think that might be possible? THE HEARING OFFICER: I guess my question is: Where is that process that Grand County is going through,

MR. WEISHEIT: Juliana said she would love to answer that question.

MS. WILLIAMS: This is Juliana Williams with Peaceful Uprising. I spoke with the Grand County Planning Commission just last week, and they said that while they'd had an initial pre-application meeting set up with Earth Energy Resources, they had not yet received an application for the conditional use permit. So that permit, in my understanding, is required before any

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to this letter, as did red Rock Forests. Unfortunately, 7 they were not able to be here today.

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When we got our 501(c)(3) status, that happened in 1902, we now sponsored four projects in Utah that indudes Colorado River Keeper, which is an affiliate of the Waterkeeper Alliance, which has it's headquarters on the Hudson River in New York. It's an international organization. There's over 150 Waterkeepers in the; world. And we also -- our other projects include the Canyonlands Watershed Council, Uranium Watch, and River Runners for Wilderness.

I would like to start out by asking a simple request of the Division, and that is, is that the administrative record allowed to be open. And I would like it to be opened until 45 days, 60, 90 days, whichever is appropriate, after Grand County issues its land use permit to EER.

23 Do you think that could be accommodated? THE HEARING OFFICER: Tell me more about the 24 25 land use plan.

mining operations can commence.

THE HEARING OFFICER: We may need some more information on that.

MR. WEISHEIT: Okay. We would love to hear it when you come to that decision.

Essentially, I would like to say that I believe this project is a project of diminishing returns, and I don't believe it has any real value or contribution to society. I see no merit in the operation, whatsoever. And I hope that the investors -- whether they be here or they read this in the press, or whatever -- would please consider an alternative renewable investment for our energy needs in the future.

I did some simple math. It's something like 19 to 20 million barrels of oil is how much this country uses in one day. And this seven-year operation will provide enough energy for four hours. And I just don't see how four hours of fuel for the nation is worth destroying this landscape that Ashley described very

It's fine for what it is. Its best value is to leave it alone as a watershed, because the Colorado River is a sole source river. It is the only river the seven Basin states have. And it's the only river that the tribes have within the Basin, as well as Mexico. I

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really don't think it is worth turning this into a national sacrifice zone -- the loss of our watershed.

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Now, I do have a few questions, and I would like to go over them a little bit. I was hoping -- I read the NOI, the Notice of Intent, for this large operation. And I have a lot of questions that I would like answered either today, or by EER in a phone conversation or letters, or by the Division. I don't know, but -- and one of them is, is I want to talk about mass wasting of the Tavaputs Plateau. Because, according to the United States Geological Survey, debris flows or mass wasting is more significant in the Tavaputs Plateau than any other place on the Colorado Plateau -- that includes the Grand Canvon and Cataract Canvon.

The trips that I have done show massive amounts of debris flowing through side canyons to the Green River. And the reason why is because there's a high clay content. And I am concerned that between the overburden, the interburden, the amount of clay mixing in with sand, I really see the potential during a heavy cloud burst that this stuff would become super saturated and would fail and fall into the drainages of Willow Creek. I'm not convinced that EER can contain this huge amount of debris mixed with clay. I think it will eventually end up in Willow Creek, and possibly even the Green River.

reason why is because this is an arid landscape. And the problem with having oil development in the Colorado Plateau has always been about accessing water, especially now because we're running out of water.

So I'm afraid that some of this water usage might affect other communities, such as Salt Lake City. which do not have an older water right. This is a 1956, 1958 water right, which is older than the Central Utah project. So they would actually have water preferences to Salt Lake City in a time of shortage. And I think that the people of Salt Lake need to know that.

I'm also concerned about the Mexican spotted owl, because there's new information that has come out from the Ninth District on the appellate court, which has ruled that habitat for the Mexican spotted owl should include, not just nesting habitat, but foraging habitat. In other words, if a Mexican spotted owl comes through this area and he takes a vole or a mouse, that is considered critical habitat. So I think that that changes some of the statements that have been written in the NOI. So I would like some clarification on this new ruling by the Ninth Circuit.

I'm concerned about light pollution, too, because this is a facility that's going to be working 24 hours a day. When I visited the PR site a month ago, I

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So I would like more information on that.

I'm also concerned about this water well. They say that the water is 360-acre feet annually, and that they need this water for seven years. It's my understanding this is a confined aguifer. In other words, it's perched in the rock itself; it's not actually flowing to the Green River. I want to know if that is, indeed, true.

And I want to know how much water is there. Do you really have enough water to do dust suppression, which I think is absolutely essential, which I'll explain later as it relates to the snow packs of the Rocky Mountains. I think this is a small, confined aquifer that really can't last seven years. I think you'll deplete it. And I would like to know if that's a legitimate concern.

I also think that there's -- I'm also concerned about water consumption. The NOI says that they need 1.2 to 2.0 barrels of water for every barrel of oil. But that -- does that include the water for dust suppression? Does that include the water for the citrus-based solvent? It takes an agricultural community to use water to make the citrus to make the solvent. That water use has to be considered into this. In other words, I want to know what the overall water consumption of this is. And the

could see Dinosaur National Monument from PR Springs.

2 And so I'm concerned that this -- when I'm, or other 3 visitors -- and I've been to the Dinosaur National

4 Monument many, many times -- and if I look out and I see

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this light pollution out there from their facility, I

6 think that that would be upsetting to some of the people

7 at Harper's Ferry -- at Harper's Viewpoint, for example. 8

So I would like to know more about that.

But my biggest reason why this shouldn't happen is because I go to meetings all the time with the seven Basin states, which include Utah, and they always talk about how there's cooperation between Utah and the other states and Mexico -- the users of the Colorado River. And right now the Bureau of Reclamation and the seven states are engaged in a \$2 million study to determine the future allocations and needs of the Colorado River in the future. They're looking at the tree ring record. They're looking at global circulation models to determine what kinds of impact climate changes are going to have on our water supply.

So Utah is, by enjoining in this -- which they are with the Bureau of Reclamation and the Department of Interior -- they are already engaged in climate change action and the issues right now, because they are part of this study. So I beg to differ. Climate change is a

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part of this, according to Utah, because they have already invested money in this research, as being done by the Bureau of Reclamation, to determine the impacts of climate change on the future. And the reason why is because they think that in 40 years the Colorado River Basin will be depleted of 3 million acre feet. And if there is a depletion of 3 million acre feet, which is what Arizona uses in one year, then there's going to be some serious problems. 

And so I think what I'm trying to say is, this kind of activity is inappropriate because it produces carbon dioxide beyond normal, as Juliana mentioned three times; it creates dust; the dust gets on the Colorado Plateau and the Rocky Mountain snow pack. It creates early evaporation, early snow melt, and sublimation in the atmosphere. And these kinds of projects is what are taking our water away. And this water is more important than four hours of oil supply for the United States.

So I do think that they need to at least -- it would be nice if the Division would take this to the other six states, to the tribes, and to Mexico, and let them assess this to see if this is the kind of activity that they want happening on their watershed. Because we're talking about a serious loss of water, otherwise. And I think it's fair that these other people know.

scope and the interest of this project to the other people, you will find that there is not a lot of support for this kind of activity on the Colorado Plateau.

I think that's all I have to say at this point in time.

Are there any questions?

MR. PICARDI: I have two questions. My name is Mike Picardi. I'm a concerned citizen. And they both require very short answers.

Has the permit already been granted for this mine, yes or no?

MR. ALDER: No. The permit has been -- the decision has been approved. The permit has not been granted. And in addition to the conditions of obtaining other agencies' approval, which could happen after the permit's been issued, the permit will not be issued until a surety has been posted. I can't remember the amount of the surety.

MR. PICARDI: And the second thing, what does Utah get back from the mine? What percentage of the money comes back to Utah?

MR. ALDER: The land is owned by the School Institutional Trust Lands Administration, at least partially. And so there's a royalty in the lease payment, that they would be better able to address. I

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I think it's also important that the Division go to Congressman Raul Grijalva in Tucson. And the reason why I say this is because he's currently introduced a bill to protect the water quality and quantity of the Colorado River below the Grand Canyon dam. So while he's trying to fix and improve the quality of the Colorado River in the lower Basin, up here in the upper Basin, we're doing things to destroy the watershed.

So there is a contradiction of things going on here between the Basins. There is no cooperation. And that's exactly against the mandate of the reclamation and the other six parties of the Colorado River compact.

the other six parties of the Colorado River compact.

So I think what I'm asking is that UDOGM please expand this to just outside of Grand and Uintah counties and involve the other people. And the reason why I say that is, Grand County has already done this once. We went to the Metropolitan Water District of Southern California, and we said, "We've got this huge Atlas tailings uranium pile right next to the river. And if the river floods and takes this downstream, it will irradiate your water forever." And it got the interest of the Metropolitan Water District, and they helped Grand County get that Atlas tailings pile off the Colorado River and into a safe place approved by the EPA.

I think you will find that if you broaden the

don't know.

MR. ANDREWS: My name is John Andrews. I'm legal counsel for the School and Institutional Trust Lands Administration.

In answer to the question, the amount that would come back would be a royalty that would go to the permanent state school fund. And I believe it's actually a sliding scale royalty somewhere between 5 and 12-1/2 percent, is my recollection. 6-1/2 at this point.

MEMBER OF THE AUDIENCE: Of what? The profit they make?

MR. ANDREWS: Of the net revenue. It's not a profit. It's based on essentially a modified gross. And the other issue would be property tax revenue, income

MR. WALLWORK: Kelsey Wallwork, Mr. Chairman.
THE HEARING OFFICER: I'm sorry, I didn't quite
hear the name

MR. WALLWORK: My name is Kelsey Wallwork. I watched the video of the Canadian tar sands. I think they said it's probably -- the land is irrepairable after tar sands mining. And if that's true, are they -- well, sorry. Just a second.

Are they willing to do this for profit, to the land if its irreparable? Is that -- I don't know if I'm

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putting it right.

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THE HEARING OFFICER: And I guess I'm not quite sure what your question is.

MR. WALLWORK: Okay. If they are allowed to do tar sands mining, would it be irreparable after they're done?

THE HEARING OFFICER: I think either the Division or the applicant can address it. But the whole concept of the Utah Mine Land Reclamation Act is that we would restore the land once mining is completed.

MR. WEISHEIT: Thank you. Because you made me think of something I forgot to say. Just one more time.

The other thing is Jane Belnap, who is a soil scientist who lives in Utah -- she's a close friend of mine -- she has written several papers that say once topsoil is removed on the Colorado Plateau, it very rarely -- what usually happens soils is it blows away or it gets washed down into the reservoir systems of the Colorado River. So the topsoil replacement -- storage, replacement, and reseeding, what I think you are really creating is a huge dust problem for our snowpack reservoirs in the Rocky Mountains and the sediment load in the reservoirs, especially in Lake Powell. I really don't think you are going to be able to contain that. I think it's going to just turn into a weed infested mess.

the expertise, the authority, or the jurisdiction of the Division of Oil, Gas and Mining. And those relate to the climate change concepts, the discussion of water rights and water quality issues, which are within other federal and state agencies and jurisdictions. And I think we need to attempt to confine ourselves to discussion: One, of the issues which DOGM can consider, and those issues that DOGM has jurisdiction over.

Turning specifically to those issues, then.

First, I'd like to correct a statement that -- I believe it was Ms. Williams made -- that this is not the first commercial tar sands facility in the United States. As many in the Division and within the industry are aware, the Asphalt Ridge tar sands project has operated off and on for over 25 years just outside of Vernal, Utah. And I'm aware there's also a number of small project -- pilot projects in other states. So that correction should be noted for the record, as well.

Second, the comparison of this project to the Athabascan tar sands is totally out of place. That is a hot water based process. It's an open process that creates large tailings ponds and large impoundments, and also a lot of residual issues. It uses a lot more water than this process will use -- probably three times as much. But other people can probably address that better

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That's my personal opinion.

I would like the Board to discuss this in more detail with Jane Belnap, who is a USGS scientist. I think she could be a valuable asset to making a determination on the environmental impacts on this particular facility.

THE HEARING OFFICER: If you could hold on with questions, I will open it up at the end of this for those types of things. But I'd like to go ahead and hear from the applicant at this point. They are the ones who are asking permission to do this, so I think it's important to hear from them and their statements.

MR. DAVIS: Thank you, Mr. Baza. My name is John Davis. As I mentioned earlier, I'm counsel for Earth Energy Resources. Initially, let me state that my understanding of the rules is that the only folks that are entitled to be heard — even in an informal conference — are those that have specifically protested, and that would be the petitioners. Let me also say, however, that we have no objection to questions or comments from the audience, so long as we keep those within the confines and the framework of this process. And I think we've got a problem with this

process. And that is, initially, that there are many issues that have been raised that are not within either

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than I. And finally, it uses a lot more energy than this process will use, and creates more CO2 emissions.

Turning specifically to what EER has done, EER has fully complied with both the mine land reclamation requirements in the Utah code and the DOGM regulations under R647-4-101, et cetera.

The approval of the NOI awaits final approval of our reclamation surety, which has not been posted yet, but will be, I believe, a \$1.7 million bond. Is that correct?

MR. CUTHBERT: That's correct.

MR. DAVIS: And also, we have an obligation to obtain other permits from other governmental entities. This has been a three-year permitting process to date --well, three-year permitting process from the beginning to the date that EER received its letter from DOGM with its approval, subject to the reclamation bond in September 2009.

As Steve Alder mentioned, you know, other agencies are involved in this. We have — the EPA has primacy in the air program in Utah on Indian — in Indian country. These lands, although they are not owned by the Indians, are within the jurisdictional confines of the Uncompander reservation. So the EPA is responsible for the issuance of air permits.

And in March of 2010, the decision was made by EPA -- and that letter is in the record -- that EER had complied with the air permitting requirements and was not required to obtain what's known as a NSPS air permit for a refinery, and that it is not going to be a major source for any, what are known as, criteria pollutants.

It has also obtained its water permits from the Utah Division of Water Quality for both groundwater and surface water. The Division has specifically made a finding that it will not impact groundwater resources from a pollution standpoint. Certainly, if water is drawn from an aquifer, there are going to be diminution of aquifers, unless there's sufficient recharge. But from a water quality standpoint, we have our permit for groundwater discharge.

Second, it will not impact surface waters. And that decision has been also made by the Division of Water Quality that no additional permit is required. We have supplied to DOGM, and voluntarily did so because it wasn't required by state law, a Storm Water Pollution Prevention Plan called a SWPPP. And that is in place, along with other litigation and protective measures designed by EER and their environmental consultants, and approved in the NOI. We're obligated to report and to correct any deficiencies in those permits.

unlikely that even in a major flood event that any water that did manage to escape from this site, if that were to happen, would ever reach Willow Creek, let alone the Green River.

As the NOI demonstrates, all runoff is designed to be contained. And further, no high TDS runoff will leave the site and/or the control systems.

As to water rights, those will be addressed by the state engineer's office. And there is a process for that, and a process for protests, if you have standing, if you are another water user that has a concern. So we don't believe this is the appropriate forum to either discuss or debate water rights or the use of water at the site.

And at this point, I'd like to, then, turn it over to Mr. Barclay Cuthbert, who is the vice president of operations, for further comments.

MR. CUTHBERT: Thank you, John. Barclay Cuthbert of Earth Energy Resources. As John mentioned, we've worked in close consultation with DOGM since September of 2006 in the development of our NOI. And certainly they have been very vigilant to make sure that we have met the requirements of the large mine permit regulations, and we've worked to do so.

MEMBER OF THE AUDIENCE: Could we ask you to

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Second (sic), we have a Spill Prevention Control and Countermeasures plan, which is known as an SPCC plan, that is designed to control spills of any chemicals used on the property, and then double containment of any tanks or any other structures on the facility. And those are in place and will follow -- they follow the requirements of the applicable state regulations.

So contrary to the petitioner's allegations, then, the operations will not, in their current form and as permitted and as implemented, pollute either the groundwater or the surface waters of the Green River system. Nor will it adversely impact air quality beyond that allowed under applicable law.

The chemical wash that the EER is going to use is an orange terpene, which is a biodegradable, organic, and citrus-based reagent that will be utilized, and then reused in the process with very little loss, other than residual loss in the wet sands that are the tailing result from the process.

result from the process.

It's correct that Willow Creek is currently identified as an impaired stream for total dissolved solids. However, any runoff that were to escape from the site would flow into Main Canyon, which is a tributary stream. But this site is 25 miles above the confluence between Main Canyon and Willow Creek. So it's extremely

stand?

MR. CUTHBERT: So my name is Barclay Cuthbert. I'm the vice president of operations for Earth Energy Resources.

Just to follow on from John's comments, I'd like to say that we have been working closely with the Division of Oil, Gas and Mining since September of 2006, to develop our Notice of Intent, to make sure that we are meeting the regulations that encompass that.

As has been mentioned previously here, there's a number of other permits that are required in order for us to begin our operations. And it is our obligation to make sure that those permits are in place before we commence. And that, you know, obviously includes the surety bond. But it's dealing with organizations like the Division of Water Quality, Wildlife Resources, the counties where operations are in place, EPA, and several others

We are anxious to get this project underway. We feel that it will be a good project for Utah, and certainly not diminishing returns. It will provide energy that is going to be used within the state. It will provide jobs to the people of eastern Utah. It will provide benefits to SITLA and other agencies. And we think that it can be a model for future unconventional

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energy development.

The process we've developed is a low water, low energy process. As John Davis mentioned, we're not going to have tailings ponds. That would minimize our footprint. We'll be able to reclaim as we go and minimize our footprint. So again, you're not going to see anything on the scale there.

The size of the resource in Utah does not enable anything that you would see -- like what you would see in Athabasca. And the nature of the resource here is also different. It necessitates a different process to extract that bitumen from the oil sands. And that's the process that we've developed and have been working to

commercialize. There's been a number of comments today about --I guess, including a global assessment of the emissions from our project. And I would comment that each step in this process is already under its own set of regulations. If you look at a refinery, it has to operate within its permit and ensure that its emissions are not exceeding what is allowed. And that, you know, to try to tie a refinery operation with our operations is really not applicable. You would not do the same thing to any other oil well or gas well in the country. And I certainly don't think it's applicable here.

where we plan our larger mining operations. And since we are planning further operations there, we did not reclaim any of that area. That does not, I guess, suggest that that's what's going to occur when we get into our large mining operations. We've got our reclamation plan within the NOI that's been thoroughly reviewed with the Division of Oil, Gas and Mining, and we intend to comply with it.

There's examples in the State of mines that occur at elevations very similar to ours. And I think that people driving by them would not know that that is reclaimed mine area. We are very confident that we can do the same in the PR Spring project. That's all for now. Questions?

THE HEARING OFFICER: Okay. Let's hold on for questions for just a minute. Give me a minute for an aside here.

(A discussion was held between the Hearing Officer and the reporter off the record.)

MR. DAVIS: Mr. Baza, I think before we conclude our initial statement -- I don't know if you want to take a break. That might be appropriate. But I would like Karla to respond and also give a brief technical summary of the control structures that they will have in place -- that EER will have in place in this process.

THE HEARING OFFICER: Yes, that's fine. I'm

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The orange material that we use, it is a byproduct from citrus manufacturing, so it's not like a bio — or ethanol for gasoline replacement. You do not grow oranges specifically for this. It's a byproduct that comes out of the existing industry. So there are no additional growth requirements to produce this chemical. It is something that is there already.

As far as the test pit that we dug in 2005, as mentioned there is water that is collected in there. And what has happened is that we dug into the top layer of the oil sands. And when that project finished, what you can see is that oil sand naturally contains any water that falls incident on that pit. So what you'll see is, the water level will rise to the level of the oil sand. And then the porosity in the rock material above that allows discharge. So there's no containment issue that hasn't been there originally.

And the other thing that I will add is, in this area, this area is a high plateau and it's incised by canyons. And if you want, you can walk around the deposit. And we've done so, to ascertain the aerial extent of it. So the exposure of that oil sand during the test operations really doesn't do anything different to what was there already. So our decision to leave that pit open -- as you can see that's right in the middle of

sorry. I didn't realize you weren't quite finished yet. So please go ahead and proceed.

MR. DAVIS: Karla, I don't know if you'd be more comfortable sitting, or if you'd like to stand up and maybe use the maps and...

MS. KNOOP: Either way is fine with me. Probably just so people can hear, I should probably stand.

MR. DAVIS: All right.

MS. KNOOP: My name is Karla Knoop. I'm a hydrologist with JBR Environmental Consultants. We are the group that assisted Earth Energy in putting together the information that was packaged as the Notice of Intent that went to the Agency to review. I certainly didn't prepare the entire NOI, but I am familiar with it. And I did prepare certain portions that had to do with the water issues in particular. And that's what I'll focus on here, since some of the comments and questions have related to water. I'll try to speak up as much as possible, I quess.

To start out with, there are several different layers of investigation that we did in working on this project as it relates to water, that served to, I guess, ascertain whether we predict environmental impacts as a result of water. The first thing that I would note would

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conditions where the property is located, and also what 3 Earth Energy has proposed to do. We may note that the watersheds that are affected by these areas are ephemeral 5 washes. They are very small. They are headwaters to 6 this other drainage, which in turn flows into Main 7 Canyon. Main Canyon is also an intermittent stream with 8 certain perennial reaches. But there's no live water, 9 surface wise, in the vicinity of the project.

be the site conditions themselves -- the environmental

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10 Groundwater is a great depth at the project, as far as is known from exploration drilling nearby. 11

> And all of this information was verified and mentioned to the Division of Water Quality when we consulted with them on the groundwater discharge permit applicability. That being said, there's also a commitment that if at a future time during operations any other water sources were found, consultation would begin again. That water would be dealt with. But in any case, that's the first level, the site conditions and what they say about the potential for water impacts.

On top of that is what Earth Energy proposed to do. Most of the facility, as a few people have mentioned, will be contained. Runoff from the pit areas, from the processing area, which is the blue area up here, from the topsoil storage areas, from the roads, will all

involved, it's essentially -- the runoff may be sediment

- 2 laden, but it won't be salty. That was one reason why
- the Willow Creek listing is not necessarily relevant, in 3
- addition to the distance considerations. So essentially,
- 5 then, what JBR did was to work with Earth Energy and
- 6 suggest some of these treatment, erosion control
- 7 features, and that sort of thing. To go another step
- 8 further to say it's one thing we all know. It's one
- 9 thing to say, "Well, this will all be contained. We
- aren't going to have a failure." But what if there is a 10
- failure? Runoff, even in the event their process water 11
- pond fails -- even though that's unlikely, even though 12
- it's designed properly, it's lined, et cetera -- what 13
- happens if that still occurs? That runoff then, in turn, 14
- 15 still has a few other layers of safety built into it. It 16 wouldn't run off down the slope because of the way the
- property is designed and because of the treatment 17

18 structures that we have.

But then you could say, again, "Well, what if those fail, or on these out slope areas that are closer to the waterways, what if they fail? What if sediment escapes? What if runoff escapes? And runoff, by the way, is allowed to escape. It's not meant to be stored entirely. It just needs to be treated. The water quality needs to be able to be sufficient so that water

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be internally draining. They will be bermed, ditched, whatever -- several other control structures, which we'll talk about in a second. But the initial layout of the project was purposely designed to prevent runoff, to prevent the discharge of process water -- water being used for supply to the process, there's a small amount of water used there -- that will be contained and recycled. It's a closed system. In the event of storm water -obviously there is snow, there is rain -- most of the 10 area will run off to the pit or to the control structures.

The only other -- the only exception to that is the out slopes of these overburdened storage piles, and these would be the triangular shapes here. Those are structures that are not fully contained and will not drain back to the pit. However, there are -- they're hard to see on this figure -- but there are structures that are designed at the toes of these to capture runoff, to treat any sediments that may be -- or to capture any sediments as well, and that water can then be discharged, but it will be treated.

One of the questions that came up was with total dissolved solids and whether that material would be conveying total dissolved solids. Because this isn't a leeching system, because there aren't marine shales

quality is not degraded, and on downstream stream standards are not exceeded. 2

And that's where the design of the interburden storage areas comes into play. And I won't go all the way into it, but they have designed encapsulation of any of the process sands. The materials that would be placed on the surface and exposed to runoff would be larger rock, not susceptible to erosion by rainfall. Mass wasting is taken care of in the geotechnical design of those structures. I'm not geotechnical engineer, so I won't go into it. But that was a consideration. They don't want those to fail. There are compaction isolation slope considerations to minimize the risk of that -- of those types of water quality impacts.

That being said again -- and I think John mentioned it -- these are ephemeral drainages. Yes, they flow; yes they convey runoff. But it's quite a distance to live water. And then as John mentioned, it's 25 miles to the confluence of Willow Creek, which is the impaired perennial stream in the state of Utah's 303(d) list, and then another 38 miles to the Green River. So it's a little bit different of an issue than if you are right on top of a perennial stream.

So that's a brief, sort of, summary of the level of analysis that we looked at, and the types of

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protective measures that Earth Energy has not only 2 designed and committed to do, but has also, by Oil, Gas 3 and Mining regulations must -- must comply with. If 4 anything that's written in the plan doesn't function the 5 way that we intend it to, or the way that we assumed it 6 would function when we did our analysis, they are 7 obligated to revise -- revise the structure, revise the 8 maintenance, revise the mining process, whatever. And 9 that goes for the other regulations that we also dealt 10 with but that we're not really dealing with here. So I 11 think that's an adequate summary of... 12 MR. DAVIS: It is. Thanks, Karla. I do have 13 a -- let me follow up with a couple of questions, though. 14 John Weisheit mentioned that, based on 15 conversations he'd had with Jane Belnap, that they did 16 not believe that the reclamation of the -- the use of the 17 topsoil and the revegetation would be successful out 18 there. 19 Do you have any comments on that? 2.0 MS. KNOOP: Well, I'm not a biologist, but I 21 do -- you know, we do deal with reclamation of projects 22 throughout the state. So I can say just a little bit 23 about that. 24 It is true that any time you salvage topsoil, 25 you are taking it out of its had natural state. There's

that?

MR. DAVIS: Ask the chairman.

THE HEARING OFFICER: Well, I think we're trying to keep that very open among the parties.

MR. DAVIS: As long as we don't get into cross-examination. I wasn't planning on doing that.

THE HEARING OFFICER: Go ahead and ask your question.

MR. WEISHEIT: Well, you know, I notice the vegetation list includes shrubs, forbs, and grass. But a lot of that is wooded. There's a significant amount of

My question is: Why are you not replacing the Douglas fir and the gambel oak that's growing there, which is roost habitat for the Mexican spotted owl.

MS. KNOOP: I didn't derive the species list myself, but I do know that the Division of Wildlife Resources, as well as the biologists from Oil, Gas and Mining were consulted, and the species list was derived based on those consultations. As far as roosting habitat, and all that, I can't really address that.

The one other thing that I wanted to say, and I don't know Jane Belnap, but I have read some of her work and am familiar with it. And she has a big following in the State and a lot of knowledge. The soils that we are

some amount of compaction, change in organic matter, content, et cetera, but reclamation happens all the time. Earth Energy followed the Division of Oil, Gas and Mining's redamation guidelines in preparing the plan. We have protective measures of the topsoil pile itself. It will be confined, kept away from oncoming runoff. It will not be eroding. I believe we called for interim vegetation to be placed on the topsoil pile, which will

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to revegetate.

help keep some of the biological activity going. We also 10 are incorporating, or placing on top, the salvaged, 11 larger vegetation from the area.

So they're doing whatever they can to facilitate the future reclamation. For one thing, it's in their best interest to. The harder it is -- the poorer the topsoil is when they go back to reclaim, the harder it is to get the plants to grow on it, obviously. And they are required by their oil, gas and mining permit to reclaim the vegetation to a certain extent. They will not be able to get their bond back until they do that. So it's in their best interest to do as good a job as they can with the redamation. And they are trying to maintain the -- by their plan, maintain the topsoil in the best quality that it can be, because it can be a tough thing

MR. WEISHEIT: Could I ask one guestion about

dealing with at Earth Energy are a lot different type of soil than are over a lot of the Colorado Plateau. We've worked with enough reclamation projects, as has Oil, Gas and Mining, to know that there are some very, very difficult areas to reseed. And this, I wouldn't count. based on what I've seen in that same -- in that same area, so. They get a little more rainfall. They are not the saline soils like we have so much of in southeastern Utah. And even on the Uinta Basin, they are not the mancos shale.

MR. WEISHEIT: The reason why -- you know, the river guides have a nickname for the Tayaputs. We call it the "wind tunnel." And it's because it's always blowing, and it's quite severe up there. And, you know, it might be better soil, it might not be as saline, but it's going through very rigorous environmental stresses at 8000 feet. So you're not going to -- well, why isn't DOGM replacing -- or requiring replacement of trees for shade and perching for wildlife?

THE HEARING OFFICER: And I'm not sure that's a question for Karla as much as it is a question for our specialist within --

MR. WEISHEIT: Like I said at the beginning, we want to understand why you are doing these things, you know. These are public lands and I think we -- you know,

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Let me ask some questions of the Division. 1 1 it's fair to ask these questions. 2 2 Is our analysis -- do we make a concerted and THE HEARING OFFICER: Well, let's put it this 3 way: Your question's been asked, and I may give the 3 significant effort to determine what erosion control and 4 Division a little bit of time to answer that. But I have 4 runoff plans have been made by the applicant? Is that 5 5 part of our analysis? some questions of my own, and I'm going to take the 6 prerogative as the hearing officer to do that. 6 MR. BAKER: Yes, it is. 7 So is there anything more you want to say, 7 THE HEARING OFFICER: Could you explain that a little more, maybe go into some explanation as to how we 8 8 Karla? 9 9 do that? MS. KNOOP: No. I don't think so. I mean, I'm MR. BAKER: I would, perhaps, have Tom Munson 10 10 happy to answer your questions, but... 11 address that, if he could. 11 THE HEARING OFFICER: John, what about you? 12 12 THE HEARING OFFICER: Okay. MR. DAVIS: No, I'm through. Thank you, Mr. MR. MUNSON: My name is Tom Munson. I thought 13 13 Baza. I'd get out of doing this, but I guess I don't. 14 14 THE HEARING OFFICER: Okay. Before we go 15 Karla gave a good explanation of the hydrology 15 further, I have a couple more questions for the court 16 of this area. It's an ephemeral drainage system, 16 reporter. 17 basically, where all these drainages would tend to flow 17 (A discussion was held between the Hearing Officer and 18 18 in response to storm events. And so we tend to look at the reporter off the record.) 19 19 that. That would be the first thing we'd look at. I THE HEARING OFFICER: All right. In order to like to look at things in a global perspective in terms 20 20 set this up, we had to beg a court reporter to come in 21 of, you know, we're not dealing with the Colorado River 21 and do this. Now, she's got a schedule she's got to keep 22 here, we're dealing with very small ephemeral drainages. 22 later on today. So I'm going to try to do the rest of 23 And there's about 12 inches of rainfall a year in this 23 this and include some questions from the audience and try 24 environment. 24 to finish up by 4:15, 4:20 at the latest. So as long as 25 25 There were some identified seeps and springs in everyone recognizes that's the target I'm shooting for, Page 62 Page 64 1 the area, but when they went out and did some 1 we're hoping to wrap up by then. reconnaissance, they could not even find the water right 2 I had a couple of questions that I jotted down. 2 3 And maybe after I ask my questions, then the Division, if 3 that had been applied for. It did not even exist. There 4 4 was no evidence of flowing water right in that area. So you wanted to try to answer anything else that there's some question regarding that, whether that even 5 5 Mr. Weisheit had. 6 6 One of the things, Mr. Weisheit, that this exists. 7 7 So when I look at a project like this, I look at informal conference requires is that we have a definitive the disturbances associated with it. And here we have 8 8 statement from you and your group as to what relief you 9 9 waste dumps, and we have a pit, and we have some are seeking. In other words, the Division has made a 10 facilities. And so the first thing I would do is, I 10 decision, at least a partial decision, on the permit would want to know what sort of controls are you going to 11 11 application. We feel it's complete. We feel it's 12 have in place to prevent this disturbance or any runoff 12 technically adequate. But I know that you are interested 13 or erosion or sediment from leaving the site or not being 13 in more information. And having worked with 14 treated before leaving the site. And so in this 14 technologists and scientists for many years, I know you 15 15 particular instance, everything that's within the pit and can always ask for more information. So at some point we 16 16 the facilities is self-contained; basically, it all have to make a decision based on what we have available drains within itself. So we wanted to make sure that 17 17 to us. 18 18 there was ditches and ponds, and things of that nature I guess I'm asking you: Based on what we have 19 within that system, that were properly designed that 19 before us today, or maybe with a small amount of 20 would contain that runoff. 20 additional information, would you see that your group 21 21 In terms of groundwater and surface water wants this permit issued, or does your group want this permits, there are other agencies involved, as well as 22 22 permit denied? myself. I'm more looking at the surface disturbance 23 23 MR. WEISHEIT: Denied. 24 THE HEARING OFFICER: Denied. Okay. Fair 24 aspect of it and how they're going to treat the runoff 25 25 and erosion associated with that project. enough. Page 65 Page 63

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And within that facilities area, they're using what -- we use storm events in terms of -- it's a design parameter where you take a certain amount of rainfall that falls within a period of time, whether that's 24 hours, whether it's 6 hours. And we go to a NOAA, a national ascribed chart, that gives us inches of rainfall that would fall within that particular -- in this particular situation, a ten-year event. It's a probability, and -- the probability of that storm occurring once every ten years. And so we use those designs, generally as a rule of thumb, to design our sediment ponds, things that would capture all the runoff and any kind of erosion from that site. And we would size them according to those design events. 

So there is a commitment in the plan that those sediment ponds, those ditches, and everything, meet those design events. And although we don't have specific designs within the plan, there's a commitment within the plan that, prior to any kind of construction occurring, that detailed engineering drawings will be supplied to the Division for our review. And if those are not adequate, we would not allow the operation to go forward. We would make sure that those designs were adequate. But we allowed it to go forward, based on the fact that they had that very specific commitment in the plan.

impact dislodging of any sediment. And then at the toe of each of these waste rock dumps, there are sediment structures that will capture any potential runoff. I feel very certain that it would be very little, if any, runoff. And because of the nature -- if you've looked at some of these drainages, there's no evidence of any defined channels. And most of the time when you go look at any kind of a geomorphic analysis or -- a geohydrology analysis of the drainage, or a formation of drainage, you look for defined channels to determine the amount of

In this situation, there's very little evidence of any defined channels. So I feel pretty certain and I feel pretty secure that there will be very little runoff in regards to this particular operation as it's designed. And that's how I kind I went about my analysis.

runoff over a thousand years.

THE HEARING OFFICER: So Tom -- oh, sorry.

MR. ALDER: You were probably going to follow up with this.

I was just going to ask if you would mention the storm water control plan.

MR. MUNSON: Oh, the storm water control plan is the S -- well the SWPPP. That is administered by the Division of Environmental Quality. But in that particular plan, there's all sorts of contingencies for

treatment of any kind of erosion or sediment that would

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Runoff from the waste rock sites are being controlled basically by the -- there's going to be a lot of coarse, rocky material. And I don't know -- you know, maybe all of all you would think of a talus slope -- you know, a rocky talus slope -- as being very similar. So you tend - in those type of situations, the main thing that causes erosion and sediment and runoff of sediment or topsoil, which is a very valuable resource, would be raindrop impact. Well, here you have a lot of rocky cover on top of this material on these waste rock dumps, so any raindrop impact from any kind of thunderstorm, or whatever, would tend to be treated, in a sense, because it wouldn't just catch the soil particles. It would be -- I look at the analogy in the desert. If any of you have ever been in the desert and look at a desert pavement. If you look at the desert soils very closely, you'll see they are covered with a lot of rock -- little tiny pebbles, okay. And that's what prevents it from running off. That's what prevents erosion from occurring.

So when you have a mine site, we're concerned about exposed soils. So generally what we'd like to have them do is put some sort of a coarse material rock, or something of that nature, over something where you have a slope like this. And it would prevent that raindrop

potentially occur during the operations that was not contemplated in the plan. And so that was one that I felt -- one of the strongest things that we could ask for was for them to put this -- make it a part of our permit and our plan. Because if you read the language of that particular SWPPP, it provides a lot of safeguards, monitoring, assurances, and requirements of the operator to maintain this facility in an orderly manner, which would preclude any kind of erosion or sediment problems. And I thought that was really important. And they went above and beyond in regards to that. And from our perspective, that's not required by our rules.

THE HEARING OFFICER: Thanks, Mr. Alder, for

THE HEARING OFFICER: Thanks, Mr. Alder, for asking, because that was a good follow up.

Yeah -- you can go ahead and sit down. I just

Yeah -- you can go ahead and sit down. I just have some process questions to ask the Division. And I don't know which one of you is going to answer this, but let me ask these things.

Tom talked about other agencies being involved in this. And I think we heard during the presentation that there are other agencies of government involved in this. If we are in a position to analyze for the mining permit under the Utah Mine Land Reclamation Act, and there is a showing that they've met those requirements,

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how is our action coordinated with some of these other agencies of government? Who else is involved, and at what level? Who has the final say for Earth Energy to go ahead and conduct business?

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MR. ALDER: That is a little bit of a complicated question, as far as who has the final say, since there are many steps and there's no mandatory way that an applicant has to go through those steps. And I think maybe Paul could address that from the Division's point of view.

MR. BAKER: Well, I would quote one of the rules, which says, "The approval or acceptance of the complete Notice of Intention shall not relieve an operator from his responsibility to comply with the applicable statutes, rules, regulations, and ordinances of all other agencies," is basically is what it says.

So we do coordinate this with the land management agency, which in this case is the Trust Lands Administration. We coordinate it very closely. And we notify the counties that are involved. But the applicant is responsible to obtain other permits that are required.

THE HEARING OFFICER: Mr. Weisheit mentioned the Grand County Land Conditional Use Permit. You are aware of that. Where are you in that process, and what is required from them in order to proceed?

2 MR. CUTHBERT: As the regulations say, we have an obligation to ensure that we have obtained all 3 required permits. And Earth Energy is committed to doing 4 5

THE HEARING OFFICER: Let me go back to the Division for another process question.

Once we approve a permit, or once a permit is issued, once all the bonding and all the bells and whistles are in place for this, our responsibilities do not end as an agency, do they?

MR. BAKER: No.

MS. DEAN: No.

THE HEARING OFFICER: What kinds of things do we do to make sure they are abiding by the conditions of

MR. BAKER: The main thing we do would be to conduct periodic inspections, and to compare the mine plan with the operations and how they're conducting those operations. And if they're not in compliance with the mine plan, then we could potentially take enforcement action, which would include a fine, and to compel them to comply with the plan.

THE HEARING OFFICER: So in the example of what Mr. Munson was talking about, let's say you do have a

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MR. CUTHBERT: Well, Grand County has a land use code and a conditional use permit application, as does Uintah County. In the case of Grand County, as mentioned, I've been down to meet with the planning department, or the planning commission, to look at those requirements. We're now -- Earth Energy is now in the process of compiling the information to meet the regulations of its land use code. And then that will be submitted. It goes through both the planning commission and the commissioner's public review of that document in order to operate in Grand County.

And as I said, the same is required for Uintah County. I may add, also, that we are working -- our traffic is going to be to the north into Uintah County, and we have been working very closely with that county on some mitigation matters, including approval of the Seep Ridge Road to reduce the dust that's created by us and by the other existing operations out there. But we are working with the groups that are out in the region to minimize the impact of our operation.

THE HEARING OFFICER: So having heard what Mr. Baker said, and knowing that you are going through this process at the local government level, I would

24 assume that your intent would not be to commence 25 operations until you had all those appropriate approvals,

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storm event and you have a condition where they weren't able to control erosion, sediment, or runoff in the mine 2 3 site. Would something like that result in a violation?

MR. BAKER: It could potentially, yes. We would 4 look at -- there are various things we would look at with 5 regard to that. If it's an extreme storm event, something beyond what the mine was designed for, we would 7 8 take that into consideration.

THE HEARING OFFICER: Okay. Mr. Alder, the next question might be for you, and that is: Once we have this informal conference, once I render a decision, there is an opportunity for appeal. And I believe that appeal, as I mentioned earlier, was to the Board of Oil, Gas and Mining.

If such an appeal is made, does the Board look at all the information fresh, or do they rely on the record that we're keeping at this level?

MR. ALDER: No, it would be -- I think that's an important question that I wanted to be sure it was addressed, since that question was asked specifically as to whether or not you could keep this hearing open. This is an appeal by specific parties of a decision that's been made. The decision to approve the notice of intention is different than the approval to go forward. In other words, once that decision has been made final,

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then it can be appealed. You don't have to wait to get the surety and get all the other permits in place, then go forward. I don't think it would be within the rights of the Division, without the consent of the applicant, to put everything on hold. They have a right to proceed, to get a final decision, and require that anybody who opposes that final decision either file a protest with the Board or let it go forward.

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So there's an obligation within ten days of your decision on this informal conference to file a request before the Board.

The hearing before the Board would be a formal adjudication. There would be a need for the parties to be represented by counsel. Witnesses would be sworn. Testimony would be given. Evidence would be presented, and specific issues would be addressed by the witnesses. So it's a much -- a little more technical and difficult burden. But that's the right of the applicant after this hearing today.

So I don't think it would be possible to hold the administrative record open. I think that's a confusion that has happened because there are so many federal hearings and federal things that allow for that type of administrative review. This is not that type of proceeding.

necessary items in issuing this permit? And if you have
questions along the line of what else the Division needs
to do or how they should do it, I'd like to hear those.
Because I do want to be inclusive in making sure that all
that information is presented. But I don't want to get
into a battle of opinions here as to whether you met some
perceived standard or not.

So knowing that, let's start out with a few questions and see.

Yes.

MR. ALDER: If I could, just before you go to that point, to address one more question by Mr. Weisheit, he asked whether or not -- or maybe it was one of the other petitioners -- asked about what the standard would be for a significant revision, or a notice of a revision in the permit application. And I just wanted to address that.

There is a statute that says that if there is a revision in the permit operations for any reason, that the applicant is obligated to apply for an amendment to that or a change to that notice of intention. And whether that is treated as an amendment or as a significant revision depends on the nature of the change.

A "significant revision" means that it would be just like a brand new application. So if they decided to

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THE HEARING OFFICER: And as I read our own rules, it says that subsequent to this hearing that we're having today, that I'm supposed to make a decision within a reasonable length of time. There's no specific date on that, it just says "a reasonable length of time."

MR. ALDER: I believe that's correct, although the Administrative Procedures Act also governs these kinds of hearings, and I think it provides for 30 days.

THE HEARING OFFICER: Okay. Just so you know, in my side conversation with the court reporter, I don't feel like I would want to make a decision without the advantage of having a written transcript from this hearing. So she indicates to me that that's probably going to take about ten working days, or two weeks, to deliver that. So I would have to assume that sometime within that two-week to 30-day period is when I would be making a decision on this matter.

But that's different than having the administrative record remain open, isn't it?

20 MR. ALDER: Yes.

21 THE HEARING OFFICER: Okay.

All right, folks. Knowing that we have a little bit of time left -- and I'd like you to remember that

what we're trying to do here is determine: Did the
Division meet its requirement to analyze for all the

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go to a larger size or to use a different chemical process, or do a different kind of remediation, then they would have to go through an entire review of all the impacts, just like they did for the initial impact.

The question that was resolved with Sierra Club and Southern Utah Wilderness Alliance was that when they start the west pit, that will be considered a significant revision, and notice will been given, and an opportunity for further analysis will be taken.

So the answer to your question is a little bit vague. The language is in the definitions of amendment. And it just says, "An amendment is an insignificant change in the approved Notice of Intention."

I think in this circumstance of this particular mine, most changes, particularly where you are expanding the size to include the west pit, would be considered a significant revision. We tried to make that assurance, but we made it expressly clear in this case. I don't know if that helps you.

THE HEARING OFFICER: Thank you.

You've had your hand up a long time. Go ahead.

MS. HENRY: My name is Deb Henry. I'm a civil engineer the (inaudible) engineering. I have a question

as far as Earth Energy Resources trucking these materials out of that area. As Juliana said, there are 19 trips in

each direction. For 350 days, on average, for seven 2 years is 93,000 trips a truck is going to be making on 3 dirt roads in that area. And I'm concerned that Earth 4 Energy Resources is not taking into consideration the damage they are going to be doing to those roads. And 6 once they do and they inevitably go bankrupt, I'm worried 7 that the resources aren't going to be in place in an 8 escrow account of some sort for an area to be reclaimed. 9 So I'm wondering what is in place right now to 10 protect us in the event that Earth Energy Resources 11 cannot fulfill that responsibility that we are allowing 12 them with this permit. 13 13 THE HEARING OFFICER: So to maybe paraphrase it 14 14 and put it in the form of a question -- I want to make 15 sure I've got this right. 15 16 16 Did the Division analyze for transportation 17 17 issues in regards to the mine permit? Is that a 18 18 responsibility of ours? 19 19 MS. DEAN: Off the mine area, no, it is not a 20 20 responsibility of ours. 21 21 THE HEARING OFFICER: So does it get analyzed, 22 22 and who would do it? 23 23 MS. DEAN: I don't know. It would definitely 24 24 not be us. I'm not sure if it is analyzed. 25 25 MS. HENRY: As those roads deteriorate, who pays Page 78 1 1 for that? 2 2 MS. DEAN: Well, it's a county road, so it's 3

that. The Seep Ridge Road, which is the primary road --1 2 access road into this area, is a county road. Typically, 3 traffic issues are addressed at the conditional use permit processes in the county. It's my understanding 4 5 that Uintah County has been, because there are a number of other oil and gas operations that are utilizing the 6 7 road. There have been requests, that have been fulfilled 8 by various companies operating, to contribute to a fund. 9 But there is also a state level mechanism called the 10 "Mineral Lease Revenue Sharing Account" that funnels oil 11 and gas revenue from federal lands back specifically to 12 transportation infrastructure.

At this point Uintah County is in the process of reengineering that road using those federal mineral leasing funds, money contributed by other companies that are operated in the area, and the like, as well as state funding for the upgrade of the road. So the main issue is that there is a state law mechanism for the recycling of revenue generated out of mineral operations to maintain transportation infrastructure.

So that's just the background. If you'd like more information, I'd be happy to share it.

THE HEARING OFFICER: Yes, sir.

MR. CATANO: Mr. Cuthbert, my concern

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MS. DEAN: Well, it's a county road, so it's
maintained by the county. But the trucks would be just
like any other licensed vehicles. Some with taxes -MS. HENRY: -- work on construction projects.

MS. HENRY: -- work on construction projects, those roads are going to be destroyed by all those trucks. And I don't think that it should be the counties' responsibility to be burdened with that -- I mean, with tax revenue being what it is.

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MS. DEAN: Well again, that's not something that we have analyzed. There is a lot of existing traffic there. But if you are concerned, that might be something that you would like to talk to the county about or some other agency that has that authority.

MS. HENRY: I just want to make sure that the permit represents what we expect of Earth Energy Resources, as far as fulfilling responsibility for the taxpayers.

THE HEARING OFFICER: I would say that any mining operation, we know involves transportation issues. And I'm not aware that in any minerals activity we have made an analysis of those transportation issues.

MS. DEAN: Right. That's not our authority.
But John...

MR. ANDREWS: I can respond to some extent on

tent on 25 Page 79

THE HEARING OFFICER: Would you state your name, please?

MR. CATANO: It's James Catano, C-A-T-A-N-O, age 59, Salt Lake City. I'm a writer and a reporter.

My concern is for the profitability of your company; because by extension, if your company doesn't make any money, the School Trust Fund doesn't get any money -- all these agencies through taxation, that never materializes.

What I've seen here is relatively small — this is my gut going off here — I've seen a relatively small area with a very limited resource to be exploited. I realize it involves a very extensive and expensive process compared to other forms of fossil fuel extraction. And you've got a product that has to be treated both on site, and a product that has to be hauled in vehicles, rather than put in a pipeline, and hauled to a refinery where you have an additional expensive process.

What I'm concerned is that this project on paper will not pan out, per se, as a viable project. Maybe it's a loss leader. Maybe it's a pilot project for something going on in Canada. Maybe their government's tax subsidies and write-offs, that this is part of it.

But my gut tells me that this project doesn't wash. So I

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21 (Pages 78 to 81)

would -- at some point -- maybe this is not the proper venue for it, because it's out of -- perhaps out of venue of this department. But before I want you messing around in my state and possibly making environmental impacts, I want to know if this is a legitimate project.

MR. CUTHBERT: All right. Well, I do think the economic analysis is outside of this particular meeting. But certainly, you know, we are not undertaking this project to go bankrupt. And there's been extensive analysis of our costs of doing this and the revenues that are available, as well as projections, as difficult as they are, of future oil prices and everything else. The economics on this project are reasonable to begin. Obviously, this is the first deployment. We'd like to see more occur as we prove our technology and prove that we can extract bitumen in a responsible manner, and that includes both Canada and the US, and potentially around the world where other oil sands deposits exist.

But we're not doing this one as a loss leader, or anything like that. The economics do stand on their own.

MR. CATANO: If this project proves viable, could then this technology be exported to the Athabasca project and mitigate some of the harsh environmental impacts up there? Or maybe you could just try it up

That's a massive project -- massive and expensive in many ways. All things going as they are, why would Utah allow you to do this for four hours of electricity?

MR. CUTHBERT: Well, there's a contribution by a multitude of sources when you look at the energy balance for the United States. And there's, I don't know, tens or hundreds of thousands of oil and gas wells around the country that are each producing a fraction of the energy that the country requires. And that extends from the Rocky Mountains to California to the Gulf of Mexico. And yes, if you look at a project in isolation, you say, "Well, yeah, this is only four hours." But if you did that for every project, there would probably not be, you know -- at least there would be very few projects in the United States that would go ahead as a meaningful source of energy if you look at it on that basis.

MS. O'NEILL: Yeah, that would be wonderful.

MR. CUTHBERT: Well, look at it honestly.

There's wells that produce tens of barrels of oil per
day, or gas wells that have low flow production rates.

So you can say, "Well, what's the point?" But the

trouble is, in their totality they meet the energy demand for the country. We just want to be a part of that.

MS. O'NEILL: So for your seven-year project, all that will go on in this seven years' time, truly

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there?

MR. CUTHBERT: Again, certainly that's in our plans. That's more long range. But yes, if we can find ways to use that in Athabasca, or find ways that we can help to make the existing operations better, we would certainly be anxious to do that.

You know, right now I can't comment on the plans about the operators in Athabasca. But once we, again, show the process does work, as we've explained, and that we were able to extract the material without creating the tailing response, and things like that, I think there will be interest in our process up there.

THE HEARING OFFICER: I saw another hand over here first.

Yes

MS. O'NEILL: My name is Andrea O'Neill (phonetic.) I'm just a concerned citizen. This is really directed towards you. I only know what I know from this meeting. And it seems like you've covered your bases. You've done all the right things. The water resource, it wouldn't have gone to another place, it seems. No storm problems. No issues. Far enough away from the big rivers. All of those things intact.

But I've heard that it's four hours of electricity that you would be deriving from this project?

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those numbers are correct, that they're not exaggerating?

I mean wouldn't we really, for the benefit of four hours -- if we could all just turn off and unplug our houses for a day, we'd be better off than supporting...

MR. DAVIS: Well, the entire United States would

MR. DAVIS: Well, the entire United States would have to do that. We consume, what is it, 20 million barrels of oil a day. So yeah, you take it from a macro standpoint, this project contributes a very small amount to that. But 20 million barrels of oil a day is a huge amount of oil utilized by this country every day. And as Barday said, every project contributes to that. The more projects we can keep in the United States, the better off we are on our balance of trade. I don't think everyone would agree to that, but I agree with you. The less energy we can use, all of us, would make great strides in reducing that.

THE HEARING OFFICER: Again, as hearing officer, I'm going to exercise some prerogative here. I'm taking great liberties with the concept of an informal conference. And, you know, I hope that the parties will accept my liberal construction here. But I think these questions are valuable. I think we've got to recognize that our agency does things in a public forum. The things we do are open to the public. And we want to make sure that we do things with full disclosure.

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22 (Pages 82 to 85)

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So again, I think that probably rather than a debate with the operators themselves, if you have specific things regarding the process, let's try to bring those out. Along the back row. Yes. MR. DECHRISTOPHER: My name is Tim DeChristopher. I'm a resident of Salt Lake City. I'm

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also a part of Peaceful Uprising. My question is for the Division regarding these last couple of comments about the positive benefit -- because most of what we heard from the Division today is that their analysis shows the negative impacts of this project are probably tolerable -- but I haven't heard from the Division of whether or not it is in your limitations, or your job as an agency, to be judging the positive benefits of a project, and whether it actually makes it worth it for us to allow an unprecedented experimental project in the watershed of the Colorado River for a foreign company to proceed with profits for providing four hours of oil supply to this country.

If it's not the job of your agency, I wonder which agency it is that's actually asking that question of whether these projects actually make sense before they go ahead.

And also along that lines, I'd like to know

change.

THE HEARING OFFICER: Rather a compound question for Mr. Alder.

MR. DAVIS: Wasn't a question. It was a speech. THE HEARING OFFICER: How would you respond?

MR. ALDER: Let me start and first of all say that, that does bring us back to the statement that I

8 made to the hearing officer at the beginning, which is that this is an opportunity to review the decision of the 9

10 Agency with regard to this particular application, based

11 on the statutes that have been set by the state

12 legislature and the rules that have been promulgated by 13

the Board, which govern the rights of individuals to

develop resources within the state.

And if they meet the requirements -- which include minimum practices for protection of water rights and for reclamation, posting a bond, those things that the legislature and the Division propose in its rules and are required to look at to make sure that it's done in a way that's considered responsible for the energy policy of the state, as it's been set by the various statutes -our obligation is to review the application and see that it has met those standards, and to do so in a way that is professional, that takes into account scientific evaluation by experts of the various issues -- water,

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whether -- if that was a factor, whether this project was judged on its sole merits, or as Mr. Cuthbert was suggesting, that this is a model or example for other projects going forward to develop the rest of the tar sands resources in the state of Utah. And if that's the case, that this -- that those other benefits were

included I think it has to be acknowledged that a lot of those other tar sands resources are on BLM land, and not only on state land. And while the state agency refuses to acknowledge the impacts of climate change, the BLM has a clear mandate, under the Secretarial Order of 3226, to weigh the impacts of climate change on any of their resource management decisions. And that is something that they're going ahead with. They've asked further resolutions beyond Secretarial Order 3226 that further define how they are going to do that, including prioritizing renewable energy on their lands. A lot of those renewable energy zones, according to the Governor's office, overlap where a lot of the tar sands resources are, in the eastern part of the state. Which, all tolled, suggest that this project is really just a bridge to nowhere. Because the rest of those tar sands are not going to get developed, because they're a terrible idea when it comes to weighing the consequences of climate

air -- that are within the jurisdiction. And those that are not within our jurisdiction are met with other agencies' jurisdiction as their mandates are set by the legislature.

So though a question, such as Mr. DeChristopher poses, might be appropriate at a forum of the energy office or the Governor's task force on energy policy, that is not the purpose of this hearing. This hearing is to determine whether -- for this specific application; for these lands; for this mining proposal with an operator who is willing to take the financial risk and believes it's profitable; and the Division has determined that if a bond has been set and is going to be posted, that that bond will be sufficient to meet all the environmental damages -- whether that was done correctly. MR. DECHRISTOPHER: So the answer to my question

is no, that --

MR. ALDER: No, Mr. DeChristopher, that's not a fair summary of what I said. The answer to the question is: It's not the question for this hearing.

THE HEARING OFFICER: I'm going to take one more

MR. DECHRISTOPHER: -- whether it was worth it. MR. ALDER: No, it is not. You're right.

MR. DECHRISTOPHER: Okay. Thank you.

THE HEARING OFFICER: I'm going to take one more question. I think fellow in the colored shirt.

MR. EHRBAR: I'm Hans Ehrbar, professor at the University of Utah. And I don't want to -- it's more a declaration. I'm not trying to be critical of the process here.

I think other people here are doing the process.

But I, as a citizen, I'm appalled that this is the process. Because this is probably not going to be the

process. Because this is probably not going to be the only tar sand development in Utah. If you look at the Alberta tar sands, it has completely altered the whole state. And that Utah does not have a process where its citizenry can intelligently decide about the benefits and the costs of this tar sand project as a whole, and whether they want to get away -- or go ahead with it, but this is just -- for us, having several different agencies who do just small parts of it, I find is appalling. And so don't take this as a criticism of you personally, but I just want to put this out there.

THE HEARING OFFICER: Well, I said one more question, but that wasn't a question. I'm going to shut it down. I'm sorry. We do have to respect the needs of our court reporter.

And I guess what I'm going to ask for is: We only have about five minutes to do this, but I'd like a

a closing comment?

MR. WEISHEIT: First of all, I'd like to say thank you to everybody for coming and for this opportunity.

I would like to say that this is the beginning of something that could be much bigger because of the potential of oils, heavy oils, in Colorado, Utah, and Wyoming. It is inappropriate to do this in the Colorado Plateau, period. Because there is not enough water to develop these resources, and so why start?

It is better to hold back, be patient with our state and federal legislatures, because we are at an impasse on our climate change legislation. It took years to get the Wilderness Act, the Clean Water Act, the Endangered Species Act. It's probably going to take years to get climate change legislation.

But we need -- as a society, we need to make these decisions because we are facing not only an energy crisis but a water crisis. And allowing these projects to go forward without resolving these fundamental important questions is wrong.

And I am aware of the constraints of the Division. I'm aware of the interests of EER. But as a society, this is inappropriate. It should not go forward.

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closing summary from each of the three parties that are party to this hearing.

Why don't we start with the Division.

MR. ALDER: I think I probably said as much in my response to Mr. DeChristopher's question as needs to be said.

I would maybe make the point that I think there's a lot of confusion about the process and the facts. This is not the Canadian tar sands development. This is a different process. It's a different location, and it's a different kind of impact. And I would respectfully ask that the Board -- I mean that the -- you, as hearing officer, and the individuals who are challenging this, analyze it in the same detailed, careful way that the Division did.

The Division agrees with the statement by the petitioners that they want a careful and deliberate decision. And that's what the Division felt that they did. And they want to meet all the mandates, including the protection of the environment, and I think that they think they did that. And anything that specifically addresses those issues, the Division cares a great deal about and believes that they've been addressing those. And that's probably all I have to say.

THE HEARING OFFICER: Mr. Weisheit, do you have Page 91

If I have to talk to the Governor, then I'm going to. If I have to talk to Congress, I am not going to stop here today. This is -- it cannot go forward.

Do you -- would you like to say something?
 MS. WILLIAMS: May I just clarify our questions.

THE HEARING OFFICER: Sure.

MS. WILLIAMS: Juliana Williams.

THE HEARING OFFICER: Take just a couple of minutes, though.

MS. WILLIAMS: Yeah, this will be quick. THE HEARING OFFICER: All right.

MS. WILLIAMS: I think there are a couple of questions we brought up in our statements that were not addressed, that we would just like to re-articulate. One is that we would like clarification on Earth Energy Resource's plan to coordinate with the counties about the access roads. You mentioned you had been communicating with them. We'd like to know what kind of communication, or what the plan is dealing with the strain on the roads, the maintenance, and the suppression of dust.

I would like clarification on assuring long-term maintenance and monitoring of the mine after the operations cease -- after those seven years. Because, you know, things happen over time, and we want to make sure that these permanent structures are continuing to

not harm the water quality and the air quality of this asked of staff immediately following this, to hang around 1 1 2 2 and try to do that. area. 3 3 But as far as the hearing itself, I'm going to We would like clarification on the testing of call the hearing today dosed. And know that a decision 4 the water quality that is in the small pit right now. It 4 5 was not addressed whether or not that had been tested for 5 will be rendered within the time period I've indicated. 6 So again, thank you very much. And I appreciate your 6 contamination above and beyond natural levels. 7 7 And then we would also like clarification, 8 8 (The proceedings concluded at 4:21 p.m.) finally, on the testing of collected precipitation and 9 9 water that's stored. We want to make sure that is tested 10 10 for contamination before it is sprayed for dust 11 suppression. 11 12 THE HEARING OFFICER: Okav. 12 13 13 MR. CUTHBERT: So I think I'd like to reiterate 14 that, as Earth Energy Resources, we have been working 14 15 diligently with DOGM in the development of our plans for 15 16 the PR Springs site. We have been through the 16 17 regulations in detail and through extensive consultation 17 18 with DOGM, making sure that we do address all the 18 19 19 requirements to commence a mining operation out there, 20 and will continue to do so. 20 21 As several have mentioned, it's not in our best 21 22 interest to create a liability that is left there. We're 22 23 quite excited about the process we've developed, and the 23 24 fact that we can extract bitumen from oil sands in a far 24 25 25 more responsible manner than has been done to date. And Page 96 CERTIFICATE 1 I think that's something that -- to be admired in the 1 2 2 country -- in the countries in North America where you 3 Stalle of Utah have that opportunity to develop the technologies and to 3 4 deploy them. As I say, we're excited to be in Utah. We County of Salt Lake ) Michelle Mallonee, a Registered 5 5 think that this will be a long-term project that will Professional Reporter and Notary Public in and for the 6 benefit the state and its citizens, and we will continue State of Utah, to hereby certify: 6 7 That the proceedings of said matter was to work with all the different agencies that we need to, reported by the in stenotype and thereafter transcribed into typewritten form; 8 to make sure that things happen as they're supposed to. 8 9 THE HEARING OFFICER: Okay. Well, I thank That the same constitutes a true and correct transcription of sale proceedings so taken and 9 10 everyone for being here today. This process is not an 11 easy one. It's hardly simple. And I know that the 10 transcribed of I further certify that I am not of kin or otherwise associated with any of the parties of said cause obaction, and that I am not interested in the event thereof transcribeds 11 12 Division staff has spent numerous hours, in terms of 13 evaluating and analyzing this project. And it's not over cause or a event thereof 12 14 13 15 As I mentioned before, I'm going to await a 14 16 transcript of the proceedings. You can probably expect a 15 17 decision from me on this hearing within the next two 16 18 weeks to 30 days. And that decision document will also 17 19 indicate what the rights of appeal are to the Board of 18 20 Oil, Gas and Mining, so that you can understand what 19 21 those are. 20 22 21 I don't really have a lot more to say. Again, I 22 23 respect everybody's time and effort to be here. I know 23 24 there were probably some additional questions that some 24 25 folks had. My sense was that if those questions can be 25 Page 97 Page 95

25 (Pages 94 to 97)

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